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ABSTRACT

To test the relationship between levels of participation and organizational effectiveness, 166 secondary school teachers completed Likert's "Profile of an Organization" and an adaptation of Belasco-Alutto's" "Decisional Participation Scale." It was assumed that Equilibrium (participating as much as desired) was the most satisfying state. Saturation (participating more than desired) was next, and Deprivation (less participation than desired) was least satisfying. This continuum of "Decisional-Deviation" correlated with perceived organizational effectiveness at .21 (significant at .001). The "Decisional-Deviation" modification indicates that over-participation as well as the more frequent decisional deprivation both detract from teacher satisfaction. (Author)

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PARTICIPATIVE DECISION MAKING AND PERCEPTIONS OF ORGANIZATION:

Refinement and Test of a Decisional Deviation Index

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Participative Decision Making and Perceptions of Organization: Refinement and Test of a Decisional-Deviation Index

Introduction

Over the past few decades the literature in management, business, and educational administration has increased in treatment of participation in decision-making as an important organizational variable. The now classic studies of Coch and French (1948) indicated that participation in decision-making was positively associated with productivity and significantly reduced resistance to change. Sharma (1955) found that teachers clearly indicated a desire to participate in decisions associated with instruction. Bridges (1967) developed a rationale for participation and a model for achieving some level in the school.

The demands of teachers, students, and community for a say in the governance process lends further emphasis for the participatory phenomena. As the Bridges' articles indicate, though, much of the concern in organizations has been with "getting it started," with implementing at least some level of participation or involvement. Throughout most of these writings there seems to be an unstated assumption that there is a straight line relationship between participation and indices of goodness for the organization. That is, as participation increases morale, productivity, and the

general effectiveness of the organization increase. It was this apparent belief that gave rise to the present study.

Purpose of the Study

The primary purpose of this study was to test the linearity assumption between participation and generalized organizational effectiveness. Is there an upper limit to participation beyond which the administrative system is no longer perceived as viable or effective? Does the perceived goodness of the organization level off or even diminish as participation increases?

Review and Rationale

Alutto and Belasco (1972) provided substantial evidence that teachers were not homogeneous in their desires for participation. They tested the assumption that:

> . . . some teachers may desire more participation than they now enjoy, others may desire less and still others may desire neither more nor less. (1971 AERA Paper)

A simple procedure for testing that belief was devised by Alutto and Belasco. They employed a questionnaire that presented twelve education-related decision areas with an opportunity to express desired and actual participation for each decision. Rather than deal with the highly confusing and subtle distinctions of "types" or "modes" of participation, they allowed the respondent to define the term for himself. Thus, if the teacher was merely asked for his opinion from time to time but was satisfied that

such consultation was what he meant as participation, than for him there was real participation. It is the personal belief that he is participating that was the significant variable.

Given the twelve decision areas the respondent would indicate those where he desired to participate and those where he perceived himself to be participating. If he indicated he was participating in fewer decisions than desired, Alutto and Belasco considered him as "decisionally deprived." If he was participating in as many decisions as desired he was at "decisional equilibrium;" and if participating more than desired he was classified as "decisionally saturated."

The Alutto-Belasco study was concerned with two questions:

1. Are the three decisional states (i.e. deprivation, equilibrium, and saturation) differentially distributed throughout the school teacher population? and

2. Are the three decisional states differentially associated with selected organizational outcomes?

The data they generated did reveal a distribution of teachers in the three discrepancy states and further supported predicted relationships with measures of role conflict, militancy, and control preferences. This was substantial support, then, for concluding that indreased participation is not a goal for all teachers and, in fact, some teachers were involved beyond their expectations. But still unanswered is the relationship of the Alutto-Belasco continuum from depreviation to saturation and the

perceptions of the administrative system. When one participates more than desired does he see the organization more positively than those in lesser states of participation?

It would appear that a predicted relationship would depend upon what is meant by "the administrative system." For this variable it was decided that Likert's (1967) conceptualization and measurement scale would be useful. Likert (1967) describes four administrative systems along a continuum with the major systems described as:

System 1: Exploitative - authoritative

System 2: Benevolent - authoritative

System 3: Consultative

System 4: Participative

The research evidence he has assembled seems to indicate that the more an organization is perceived as approaching System 4, the higher the performance goals, the higher is productivity and the better the overall performance. Furthermore, conflicts are more constructively resolved and the capability to change is significantly greater. Finally, approaching System 4 finds higher levels of motivation, better communication in all directions and greater confidence in trusting and cooperating behaviors.

These findings and conceptualization seem to support this variable as a pertinent criterion for comparing with decisional states. It would certainly seem logical that participating in the decision-making within a school would positively affect the individual's perceptions of such factors as flow of communication, receptivity to change and the level of productivity. But, is the peak for such perceptions at

equilibrium or saturation? It was this question that became the primary focus of the study.

Procedures

A group of secondary school principals and assistant principals from districts located in Western New York State had been participating in a three year project for "humanizing schools." I had been with that group for two years as a "participant-consultant." In that role I was able to secure their cooperation to participate in an evaluation study of the project. The data for the study reported here was derived from that evaluation. Eleven secondary schools representing eight school districts formed the population for this study. The districts represented included a large city, suburban districts and small rural-type systems.

From each of the eleven schools a random sample of 20 teachers was selected. The sample was drawn by the school secretary (given instructions for selecting teachers) and that secretary distributed the instruments. They were returned by mail by each respondent to the author. There were 166 useable returns which was a 75 percent response. Since the main concern for this study was with the association of the variables this return was sufficient to conduct the anticipated analyses.

Instrumentation

As was indicated above, the criterion variable was measured by Likert's Profile of a School which was derived from Likert's (1967) Profile of Organizational Characteristics. The Profile of a School has been used in over 50 school systems with more than 300 principals, 2000 teachers, and 2300 students (Likert, 1970). The mean scores

for the eleven schools are listed in Table 1. While most of the schools fell in the range of the "Consultative System" (3.00 - 3.99), the individual perceptions of teachers showed considerable dispersion. The lowest teacher score was 1.87 indicating the system was perceived as "Exploitative-authoritative;" the highest teacher score was 4.69 which indicated that the system was perceived as "Participative." Thus, when teacher perceptions were considered as individuals, the full range of the continuum was covered.

Insert Table 1 about here

The Alutto-Belasco (1972) questionnaire measuring decisional condition was modified for the independent variable measure. The first modification was a shift in the decisional situations. The principals who participated in the study reviewed the original set of situations (Alutto & Belasco, 1972) and indicated that there was some redundancy with certain situations and that others may be more appropriate for their teachers. Consequently, one item was added (dealing with administrative services); one eliminated (determining disciplinary policies) and two were collapsed into one item (instructional policy determination and determining instructional methods and techniques). Since the individual decisional situations are not considered for analysis and since the main requirement was that the situations provide the teachers with an opportunity to express present and desired states of participation, the changes were not considered as a major alteration. The eleven decision situations

TABLE 1

School Means on the Profile of a School

School	Mean Score	Rank
A	3.177	7
B	2.952	11
C	3.113	9
D	3.279	4
E	3.256	5
F	3.169	8
G	3.456	3
H	3.840	1
I	2.969	10
J	3.253	6
K	3.491	2

that were used for this study are listed in Table 2.

Insert Table 2 about here

The second modification that was made was a change in the response format. The original instrument only allowed the teachers to indicate "yes" or "no" as to their present or preferred states of involvement. This was revised to allow teachers the opportunity to indicate the degree to which they are involved as well as their preferred states of involvement. A typical item in the revised questionnaire read:

When a new faculty member is hired in your school or department, would you be involved in making such a decision?	Never__	Some-times__	Often__	Always__
Do you want to be involved in making such decisions?	Never__	Some-times__	Often__	Always__

The modification in response format necessitated some alteration in the derivation of a score for each respondent. What was apparently a simple and direct scoring procedure with the original instrument now became a major problem. But, this thorny situation was the precipitating factor for developing the notion of "decisional deviation."

Scoring: Multiple Approaches

When the response format was "yes-no" Alutto and Belasco (1972) derived an index "by summing over the number of decisions in which each teacher currently participated and those in which he wished to participate, and then computing the absolute difference between these two figures." Thus, a teacher might indicate a "deprived state" on an

TABLE 2

Decisional Situations in Revised Questionnaire

1. Hiring a new faculty member in school or department
2. Preparation of school or department budgets
3. Selecting new textboks
4. Resolving student academic or personal problems
5. Determining individual faculty assignments
6. Resolving a faculty member's grievance
7. Planning new building facilities
8. Resolving problems involving community groups
9. Resolving problems with administrative services
10. Determining faculty members' salaries
11. Determining general instructional policy

item or two (i.e. he is not involved but wants to be); a "saturated state" on an equal number of items (i.e. he is involved but would rather he were not); and perhaps at "equilibrium" for the remaining items (i.e. involved or not involved matches his preference for involvement). This results, in the Alutto-Belasco scheme, in a cancelling process so that such a person's absolute difference is zero. Therefore, he is assigned to an "equilibrium condition." This seemed to me to be less than desirable as the areas of desired and actual involvment indicates some degree of discrepancy for that person but such discrepancy was ignored by the scoring approach.

The revised response format facilitated some variations in scoring. But, at the same time the revision made it difficult to duplicate the Alutto-Belasco scheme. Consequently some choices were made which might then approximate that scheme. The three scoring approaches that were devised were:

1. Decisional Condition: an approximation of the original Alutto-Belascoscoring identifying the three conditions of decisional deprivation, decisional equilibrium, and decisional saturation.
2. Modified Decisional Condition: an application of the above scheme but using the response format that indicated the degree of involvement perceived or desired.
3. Decisional Deviation: a reconceptualization of involvement which results in a continuum from "severe perceived deviation" to "equilibrium."

Decisional Condition Scoring: It was argued that the Alutto-Belasco "yes-no" format was concerned with whether a person perceived

himself involved, no matter how much or how little, versus no involvement whatsoever. Therefore, a check in any of the choices that indicated some degree of involvement was treated as a "yes" even though the person may have indicated some difference (perceived or desired) within that choice. This, then, collapsed the individual's responses to "yes-no" categories so that the original Belasco-Alutto scoring could be applied.

Modified Decisional Condition Scoring: This scoring maintained the general approach of the above but utilized the expanded response format. It involved a two-step procedure. First, the "directional value" of each item is computed. This is accomplished by assigning a value of "1" to "never," a "2" to "sometimes," a "3" to "often," and a "4" to "always." Then the difference is computed between the actual and desired involvement ($a - d$ = directional value). A negative result indicates deprivation for that item with the number (1, 2, or 3) the degree of deprivation. A zero indicates equilibrium. A positive result indicates saturation. Thus, if s indicated he is "sometimes" (value 2) involved but desires to be involved "always" (value 4), then the directional value for that item is $2 - 4 = -2$; s on that item is deprived. For descriptive purposes a difference of 1 is considered "slight" (slightly deprived or saturated), 2 is either deprived or saturated, and 3 is "severe" (severely deprived or saturated).

The second step was to sum the directional values. If the sum were zero the person was assigned the equilibrium condition. If the sum were negative the deprivation condition and positive the saturation

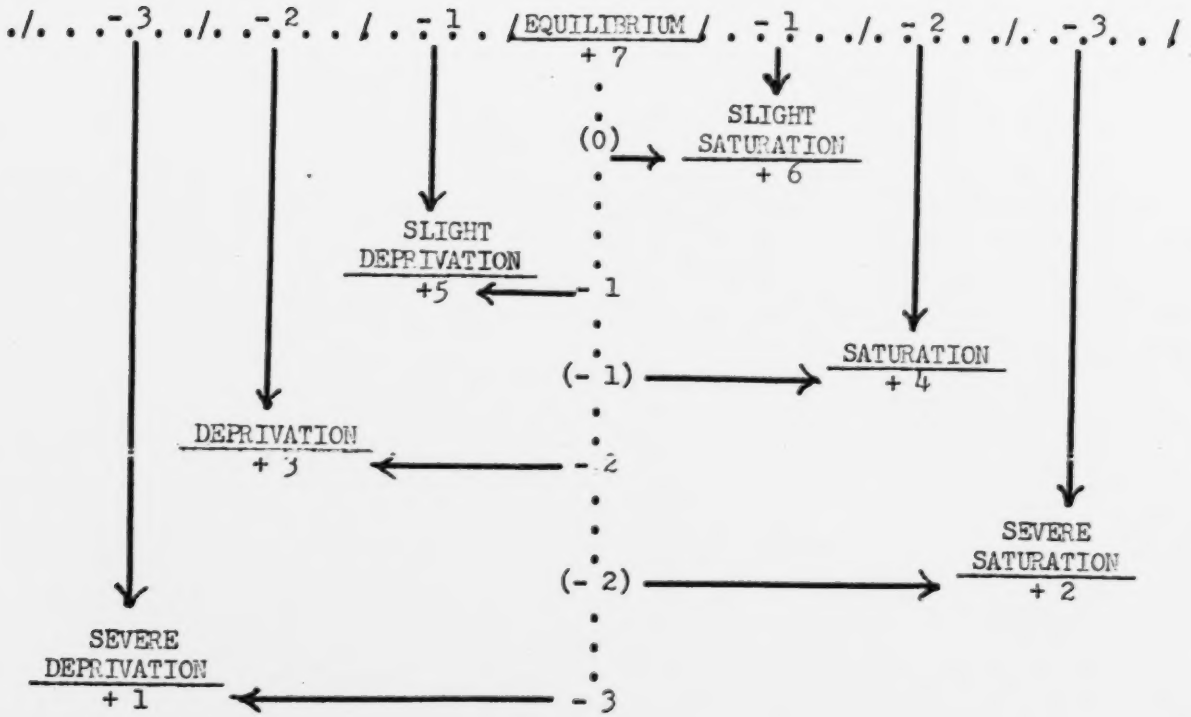
condition. This procedure maintained the cancelling aspect of the Alutto-Belasco scheme but allowed for differences in degree of deprivation or saturation that might not totally cancel. That is, S may have nine zero values, a + 3 (severe saturation) and a - 2 (deprivation). S's total would be a + 1 indicating some saturation and place him in that condition.

Decisional Deviation Scoring: The concept of decisional deviation is based on the assumption that the most optimum state for an individual is the equalization of the actual and preferred levels of involvement. Any deviation from that state then detracts from optimization. Thus, using the terms from above, a person at "equilibrium" should have the most positive perceptions of the organization and as deviations from equilibrium occur, the postive perceptions will decrease. A further assumption is that involvement is a state that facilitates a more positive outlook than does a state of deprivation from involvement. The two assumptions, though, are interwoven when put together. That is, a slight deviation from equilibrium towards saturation (involvement) detracts less than the same deviation toward deprivation (lack of involvement). Further, a slight deviation toward deprivation detracts less than a major deviation toward saturation. In this second case, even though we are comparing lack of involvement with saturated involvement, the degree of the deviation is less and thus less distracting from the optimum state. This is pictured in Figure 1. Equilibrium is at the high point in the picture and as there is movement horizontally from that point there is a decreased state. But likewise, as there is movement in the vertical direction there is also a decrease.

Insert Figure 1 about here

FIGURE 1

Decreasing Deviations From Equilibrium



To demonstrate further, "Saturation" is two deviations on the horizontal (- 2) and one deviation on the vertical (- 1). Subtracting those deviations from the optimum state of "Equilibrium" (+ 7) results in the value + 4. These are the deviation values for each item. The deviation values are then summed for the total position of the S; i.e. his Decisional Deviation Index is the sum of the item deviation values. The range of the Decisional Deviation Index for an eleven item questionnaire is from the low of eleven (11) to the maximum or optimum score of 77. This is a continuum then, from greatest deviation from a desired state of involvement (severe deviation) to the least deviation or equilibrium.

It was predicted that there would be a direct relationship between the level of S's Decisional Deviation and the perceived level of the organization on the Profile of a School.

Results

Each of the instruments were scored three times for each of the scoring approaches described above. The results were compared and correlated with the Profile scores. The comparisons and scoring for the Decisional Conditions are described first, followed by the results of the Decisional Deviation approach.

Decisional Condition Comparisons

. The Decisional Condition approach that approximated the original Alutto-Belasco ("yes-no" response format) resulted in the following Profile means and standard deviations for the conditions of "deprivation," "equilibrium," and "saturation:"

	Deprivation	Equilibrium	Saturation
Mean	3.26	3.38	3.18
S.D.	.5455	.5359	.3335
N	120 (72%)	40 (24.4%)	6 (3.6%)

The distribution of the sample among the three categories was compared with the distributions found by Alutto & Belasco (1972) and Best (1973). The Alutto-Belasco distributions were (N = 454):

Deprivation	Equilibrium	Saturation
57.2%	23.6%	19.2%

Best used the "yes-no" response format and found his total sample of 182 distributed in the following proportions:

Deprivation	Equilibrium	Saturation
81.8%	15.9%	2.2%

In all three studies the general distribution seems to flow in the same direction with the great bulk of the populations in the deprived categories and the fewest in saturation. When the Modified Decisional Condition scoring approach ("Never to Always" response format) was employed the means, standard deviations, and distribution were:

	Deprivation	Equilibrium	Saturation
Mean	3.27	3.40	3.30
S.D.	.5387	.4312	.5556
N	144 (86.7%)	9 (5.4%)	13 (7.8%)

This distribution varies from the above in that the "Equilibrium" and "Saturation" conditions are reversed in their proportions of the sample. The shifts between Decisional Condition and the Modified D.C.

tend to support the notion that the original Alutto-Belasco form of scoring may "hide" individuals in certain categories. Five S's moved from "saturation" to "equilibrium" and one S moved from "saturation" all the way to a "deprived" condition. Some twenty-seven S's were shifted from "deprivation" to "equilibrium" as a result of the modification in format and scoring. This resultant shift is, of course, still speculative since the actual categories of "yes" and "no" were not used but only approximated from the responses. Nevertheless, the shifts do raise some question as to the validity of assigning persons to the decisional conditions with the Alutto-Belasco scoring approach.

In both the Decisional Condition and the Modified approach the group at equilibrium had the highest (most positive) perceptions of the organization. In the Alutto-Belasco approximation those in the saturated condition were actually lowest in their perceptions of the system. This lends strong support to the central concern of this study that the relationship between participation and perception of "organizational effectiveness" is curvilinear. That is, that as participation goes beyond the amount desired, the individual's view of the organization grows commensurately more dismal. This was further tested by correlating Decisional Condition with the Profile perceptions. When the conditions were ordered from deprivation through equilibrium to saturation the correlation was .05 (n = 166). With this same ordering the correlation with age was .20 (n = 164). When the order was changed to deprivation through saturation to equilibrium, the correlation increased to .09.

While the correlations of .05 and .09 are not significant, the

change in size supports the prediction that the condition of saturation detracts from the most desired state of involvement for the individual. Furthermore, the significant correlation (.20) between the conditions (when saturation is considered highest) and age is consistent with the Alutto and Belasco (1972) findings that the saturated tend to be older females. The significance of this latter finding is that the potential for a significant correlation with the measures used is possible, but was not found with the perceptions of the organization.

Decisional Deviation Findings

The scoring approach that placed equilibrium as the most desired state and then intermixed saturation with deprivation resulted in a correlation with the perceptions of the organization of .21(n = 164). This was significant at the .001 level for a two-tailed test. The correlation with age was .17 (n = 162) which was lower than the relationship of age with Decisional Condition. The same phenomenon, though, seems to hold; that is, the older teachers appear to be those who have been able to involve themselves as much as they want. But, still recognizing that some of the older teachers find that they are being called upon to participate in decision making somewhat more than they would prefer.

A similar relationship was found for experience but it was not quite as strong as the age with r = .13 (n = 162). This is expected because of the strong relationship between age and experience but in this case, it appears that age is the stronger factor for involvement than "knowing the system" through experience.

The relationships between Decisional Deviation and the Profile of the School scores were also computed for males and for females. The correlations for males (n = 92) was .16 while for females (n = 70) the relationship was .23. This is a fairly large difference for the two populations and one that warrants further investigation to help explain the difference. Why should the involvement levels for females be more highly associated with their perceptions of the organization than the males?

One final finding should be reported. Since the Decisional Deviation Index appears to be a measure of the individual's satisfaction with his level of involvement, it seemed that the measure should show a high association with a single item on the Profile that dealt with the school environment:

"What is the general attitude of teachers toward your school as a place to work?

Hostile _____ Strongly Favorable"

The association was found with the correlation being .23 for 162 teachers. Again this was a highly significant association.

Conclusions and Implications

The results of this study tend to support three main conclusions. First, the relationship between perceived and desired involvement in school decisions and the perceptions of the "goodness" of the organization is curvilinear. The peak of perceptions is at the place where the present and desired levels of involvement are equal. Both deprivation and saturation detract from that optimum state.

However, even though there may be some fall off from the saturated condition, the tremendous proportions of teachers that have been identified in the deprived condition through this study, Best's (1973) and Alutto and Belasco's(1972) tend to indicate that the great need in schools is still in the direction of increasing the level of involvement, particularly for those teachers who are younger in age. The only caution is, that some type of monitoring of the teacher preferences for involvement might help to avoid the over participation which can be as counter-productive as the deprived states.

The second major conclusion is the highlighting of a possible weakness in the Decisional Condition approach of Belasco and Alutto. It appears possible that the use of the "yes-no" response format for ascertaining present and preferred involvement may misplace persons in the conditions. Their approach tends to swell the equilibrium category, moving many who are possibly deprived in some minor way and considering them as at equilibrium. If that is the case, then this may provide a false picture of those in equilibrium for it may reduce or flatten the effects of that group. This conclusion is one that is quite speculative and needs further probing, for the approach used in this study may have distorted the information.

The third outcome is the Decisional Deviation Index. It appears that this concept and instrumentation is a viable one for monitoring the system. The measure is easily administered and provides a simple picture of the state of the system. The significant correlations found in this study were even surpassed when the instrumentation was further simplified by Best (1973). He maintained the

"yes-no" response format which enabled him to make a direct comparison with the decisional conditions. When he correlated Decisional Deviation with morale (Purdue Opinionnaire) he found an $r = .355$ with an n of 182.

Of equal significance to the instrumentation is the finding that morale or satisfaction or the perceptions of the organization are not simply a function of involvement, but rather are related to the level of involvement that the individual prefers. A few years ago a black student addressed a group of administrators and told them that they could not expect to "get by" with appointing a number of students to committees. Rather, he said, you must find those students that want to work on committees and then help them to achieve that desire. The decisional deviation concept supports that notion. Administrators must match the desire for participation of the individual with the opportunities for actuation. That type of action calls for a sensitivity to the shifts in the human environment that may be difficult if not impossible without some monitoring system. In addition, it is likely that the type and level of the participation may be equally important. Additional research that probes those dimensions is a likely area for refining the associations explored here.

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